



FirstNet™

FloridaNet Project Status Update

Florida Police Chiefs Association

January 12, 2016



Topics

- Brief Overview
- FirstNet
- FloridaNet
- Looking Ahead

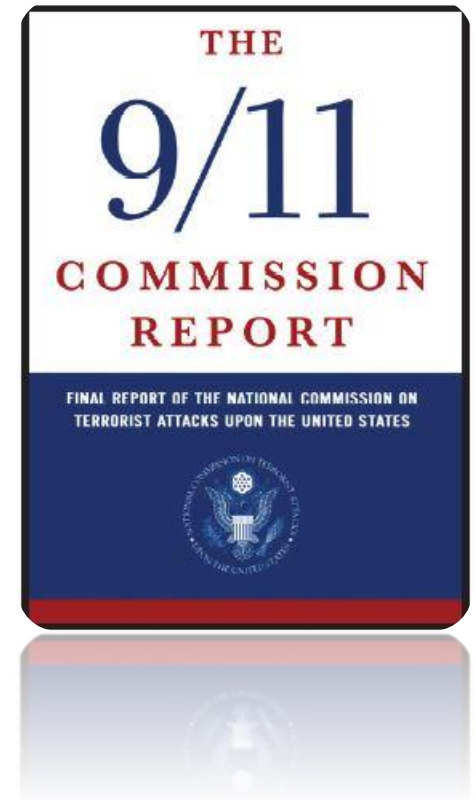


Brief Overview



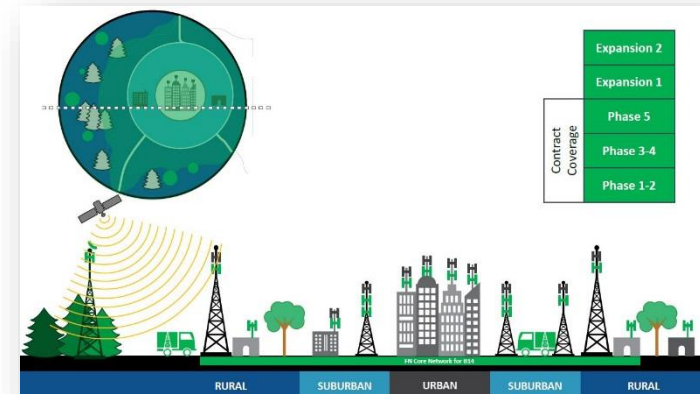
Middle Class Tax Relief and Job Creation Act of 2012

- Developed from the 9/11 Commission Report
- “Spectrum Act”
- Devoted 20MHz of 700MHz spectrum to Public Safety
- Established the First Responder Network Authority (“FirstNet”)



Nationwide Public Safety Broadband Network (NPSBN)

- Based on Long Term Evolution (LTE) standards
- Mandated to meet “rural milestones”
- Priority and Preemption capabilities
- Funded by leasing excess capacity
- 5 Phases of build-out
- FirstNet must build the Core
- States may build the Radio Access Network (RAN) within their geographic boundary (“opt-out”)





FirstNet



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FirstNet Overview

- (Quasi) Independent authority in DOC's NTIA
- Establishing mission-critical data communication network as Nationwide Public Safety Broadband Network (NPSBN)
 - Allocated \$7 Billion from Advanced-Wireless-Services 3 auction
 - Must hold State Consultations to develop policies and requirements
 - Must consult with the Public Safety Advisory Council (PSAC)
 - Must be financially self-sustaining
 - May be influenced by the Public Safety Communications Research group (PSCR) and the National Public Safety Telecommunications Council (NPSTC)



FirstNet Developments

- Organizational Changes
- Completed State Consultations (1st Round)
- Held two Industry Days
- Held two State Single Point of Contact (SPOC) meetings
- Released:
 - 1 Request for Information (RFI)
 - 3 Requests for Comments (RFCs)
 - Draft RFP
 - Draft Cyber Security Appendix
 - 1st & 2nd Interpretations
- Will release Final Request for Proposal (RFP)



Requests for Information (RFI)

- In 2013, FirstNet released 12 RFIs seeking input on various equipment and technology applications
- In 2014, FirstNet incorporated info learned from the previous RFIs and then asked for specific info on industry capabilities and business models
- This current RFI sought answers regarding:
 - Buildout, deployment, operations and maintenance of the Network
 - Cost considerations and financial sustainability
 - Speed to market
 - System hardening and resiliency
 - Use of existing governmental infrastructure
 - Priority and preemption
 - Customer care and marketing
 - General compliance with the Act



Requests for Comment (RFC)

- FirstNet sought comments on the following:
 - 1st - Core and RAN, legal scope of users, service offerings, RFP process, tech requirements, rural milestones, leveraging existing infrastructure, and fees
 - 2nd – Devices, network policies, FirstNet Plan and State-built RAN
 - 3rd – Definition of “Public Safety Entity”



Draft Request for Proposal (RFP)

- FirstNet sought feedback on:
 - FirstNet's approach to serving public safety
 - Deployment and operation of the Network
 - Proposed financial sustainability model
 - Operation architecture



Cyber Security Notice

- Outlines key considerations for foundation
 - How it should be designed, established, sustained
- Opportunity to innovate and be creative
- Key Concepts
 - Architecture and Lifecycle
 - Risk Management
 - Monitoring and Mitigation Methodology
 - Environmental and Physical Security
 - Data Sensitivity



Final Interpretation – 1st Notice

- Core Network and RAN defined
 - FirstNet will be the only one allowed to build the Core
- Secondary users defined
 - Any non-public safety user
 - Through Priority and Preemption, FirstNet believes 20MHz will provide sufficient capacity for shared use
- Rural defined
- Fees Assessed
 - Network user fee, Network capacity fee (CLA), Network equipment/infrastructure fee, State fee to access Core



Final Interpretation – 2nd Notice

- Technical Requirements
 - Promoting competition for equipment ‘on’ the network
 - Equipment must maintain interoperability
 - Applies to either FirstNet-built or State-built RAN
- Network Policies
 - Applies to all elements of the network, whether FirstNet-deployed or State-deployed
- State/Territory Assuming Responsibility
 - Governor makes statewide decision
 - Opt-in States can add extra RAN
 - A State opts-in if it does not opt-out within 90 days





FloridaNet



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FloridaNet Past Activities

- Established Governance structure:
 - Executive Committee
 - Technical Committee
- Responded to:
 - FirstNet's Request for Information (RFI)
 - 3 Requests for Comments (RFCs)
 - Draft RFP
 - Draft Cybersecurity Appendix
- Completed a Statewide Contract Vehicle Survey and published a White Paper

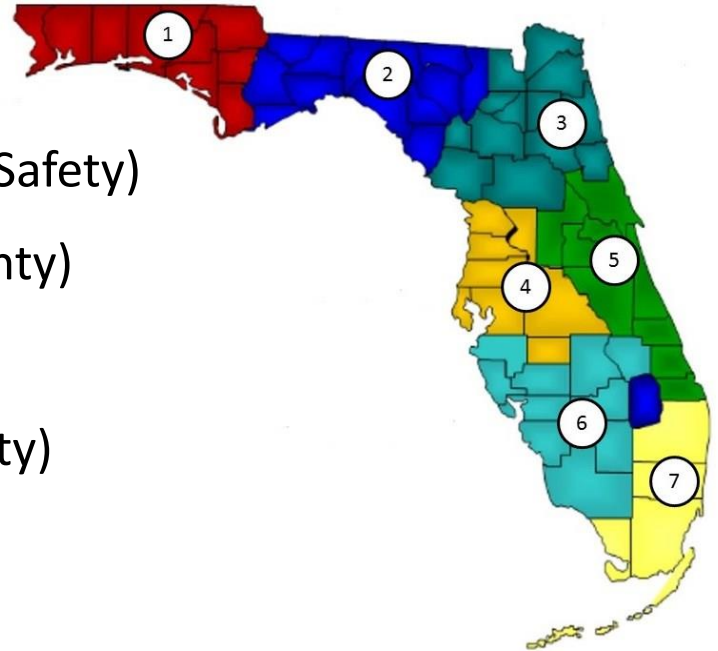


FloridaNet Executive Committee

- **CHAIR:** Terry Rhodes
- **Governor's Office:** Jason Allison
- **Homeland Security Advisor:** Donna Uzzell
- **FPCA:** Daniel Alexander
- **Seminole Tribal Rep:** Bobby Brown
- **Miccosukee Tribal Rep:** Ray Weeks
- **FSA:** Steve Casey
- **DMS:** Bill Rogers
- **DEM:** Phil Royce, SWIC
- **DOH:** Mike McHargue
 - *Ex Officios: Dr. Joe Nelson, John Wilgis,*
 - *April Henkel, Dr. Peter Pappas*
- **Technical Committee Chair:** Greg Holcomb
- **DEO:** Sherri Martin
- **Private Sector:** Mike Sole (FPL)
- **State-wide EMS Representative:** Greg Rubin
- **FL Army National Guard:** Major Ralph Sullenberger
- **DOT:** Paul J. Steinman, P.E.



FloridaNet Technical Committee



- **CHAIR:** Greg Holcomb (Lake County Public Safety)
- **Region I:** George Hawkins (Santa Rosa County)
- **Region II:** Nicholas Simoncini (FDLE)
- **Region III:** Alphonso Gordon (Marion County)
- **Region IV:** Terry Nehring (City of Tampa)
- **Region V:** Richard Steiner (Orange County)
- **Region VI:** Bob Finney (Collier County Sheriff's Office)
- **Region VII:** Cindy Cast (Miami-Dade County)
- **UASI:** Norm Poe (Orlando)



Education & Outreach

- Performed listening sessions and workshops
- Developed education and outreach materials
 - Brochures
- Created a website – www.FloridaNet.gov
- Presented at several FirstNet-related events
- Attended various conferences (e.g. IWCE, APCO)



Request for Information (RFI)

Florida's Response

- Build, deploy, operate and maintain the Network
 - Tech requirements should meet needs of state
- Speed to market
 - Meeting public safety needs is more important than speed
- System hardening
 - Prioritize facilities, harden against cyber attacks, and complement local solutions
- Priority and preemption
 - Needs to be determined between FirstNet and State
- Customer care and marketing
 - FirstNet should collaborate with the State to deliver the best service



Requests for Comment (RFC)

Florida's Response

- 1st – Network, users, request for proposal (RFP) and fees
 - Network – Should be flexible
 - Users – States should determine
 - RFP – FirstNet should continue to consult with the states
 - Fees – Opting out should only require a core and spectrum use fee
- 2nd – Devices, policies and plans
 - Devices – Must operate seamlessly across the Network, backwards compatible, must have competitive ecosystem
 - Network Policies – Commercial partners should shape tech requirements, Public safety should determine operational requirements
 - FirstNet plan vs. State-built plan – Criteria should be shared, FirstNet must consult directly with states rather than just through notices and process for opting out seems undesirable
- 3rd – “Public Safety Entity” definition
 - Should be established through the Public Safety Advisory Committee (PSAC), direct consultations with states, local public safety users
 - Individual States should assign priority, preemption and access rights



Draft Request for Proposal (RFP)

Florida's Response

- Responded on July 27, 2015
- Commented on 51 of the 647 areas in the Operational Architecture
- Florida suggested the Network Policies should be:
 - Developed by the State
 - Implemented by the Vendor
 - Measured & Enforced by FirstNet



Cyber Security Notice

Florida's Response

- Key Concepts:
 - Risk Management
 - Defining acceptable risk
 - Viability of mitigation
 - Environmental and Physical Security
 - Hardening
 - “Disparately Deployed”
 - Information Security and Data Sensitivity
 - Prevention and Protection
 - Retention Policies

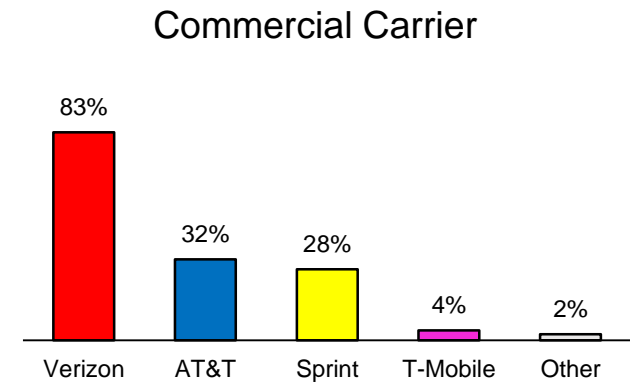
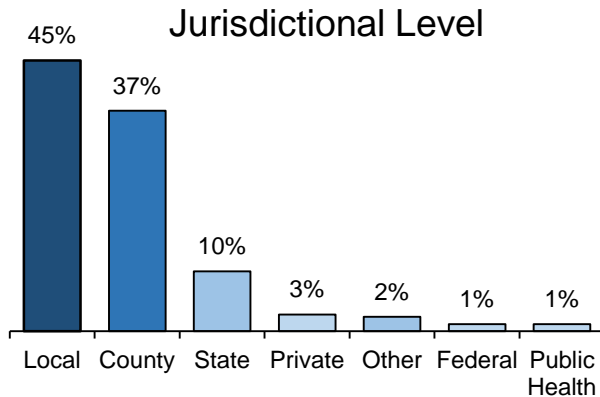


Contract Vehicle Survey

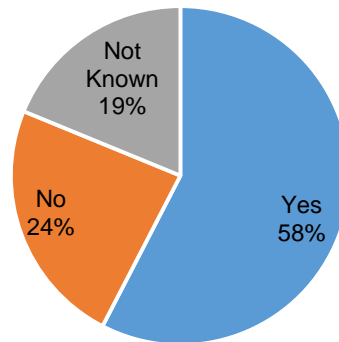
- Conducted Survey from January to September
- Aggregated Survey info and sent to FirstNet
- Produced White Paper



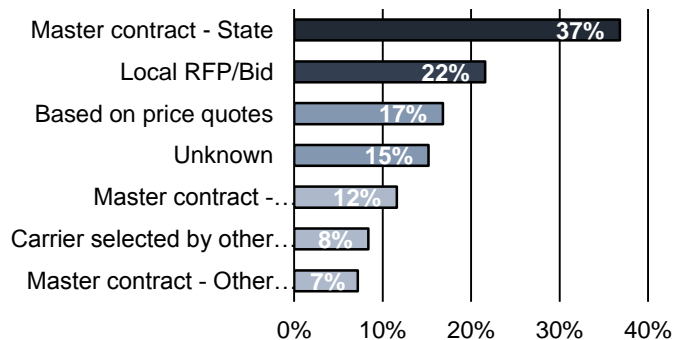
White Paper Results



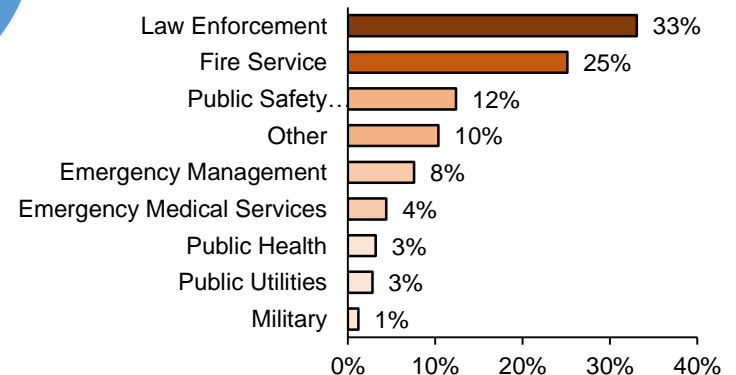
Data Usage Monitoring



Procurement Method



Discipline



White Paper Results (cont'd)

Region	Surveys Sent (#)	Response Rate (%)	Counties Represented (#)	Highest Population	Lowest Population	Average Population Density	Most Common Carrier	Most Common Procurement Method	Devices per Employee	Organizations Monitoring Data (%)	Organizations Requiring Multiple Carriers (%)	Price per Device per Month	Most Common Data Plan	Most Common Mission Critical Application
1	45	44%	5 of 10	305,817 (Escambia)	14,625 (Calhoun)	157	Verizon (85%)	Master Contract – State (35%)	2 (55%)	45%	15%	\$50 or Less (73%)	Unlimited (80%)	Internet Browsing (79%)
2	76	22%	8 of 13	275,487 (Leon)	8,365 (Liberty)	67	Verizon (100%)	Master Contract – State (41%)	2 (44%)	41%	24%	\$50 or Less (81%)	Unlimited (89%)	One-way Messaging (63%)
3	70	46%	11 of 13	885,855 (Duval)	15,535 (Union)	228	Verizon (81%)	Master Contract – State (35%)	2 (31%)	59%	21%	\$50 or Less (74%)	Unlimited (82%)	One-way Messaging (74%)
4	110	23%	7 of 8	1,291,578 (Hillsborough)	27,731 (Hardee)	838	Verizon (92%)	Master Contract – State (28%)	2 (52%)	52%	28%	\$50 or Less (91%)	Unlimited (83%)	Internet Browsing (84%)
5	192	58%	9 of 9	1,253,001 (Orange)	141,994 (Indian River)	573	Verizon (75%)	Master Contract – State (28%)	2 (35%)	57%	51%	\$50 or Less (76%)	Unlimited (79%)	One-way Messaging (79%)
6	79	36%	9 of 10	661,115 (Lee)	12,884 (Glades)	253	Verizon (85%)	Master Contract – State (39%)	2 (36%)	55%	15%	\$50 or Less (87%)	Unlimited (90%)	Internet Browsing & One-way Messaging (78% each)
7	94	34%	4 of 4	2,662,874 (Miami-Dade)	73,090 (Monroe)	892	Verizon (84%)	Master Contract – State (41%)	2 (36%)	81%	31%	\$50 or Less (80%)	Unlimited (75%)	CAD Interface (84%)
Total	566	38%	53 of 67	2,662,874 (Miami-Dade)	8,365 (Liberty)	430	Verizon (86%)	Master Contract – State (35%)	2 (41%)	56%	26%	\$50 or Less (80%)	Unlimited (83%)	One-way Messaging (73%) Internet Browsing (69%)

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Data Collection

- Determined agencies with data monitoring software
 - Reached out to those agencies to provide data
- Determined minimum data to collect
 - e.g. location, responder type, time, applications
- Submitted initial data to FirstNet by 9/30/15
 - 90 files (616MB) were sent
- Continue to send data to FirstNet
 - Netmotion
 - Agencies that submit to FloridaNet
- Develop vendor specifications for data collection
 - Deliverable timelines, data formats, etc.
- Begin vendor data collection effort in 2016





FirstNet Maps



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FirstNet Data Review

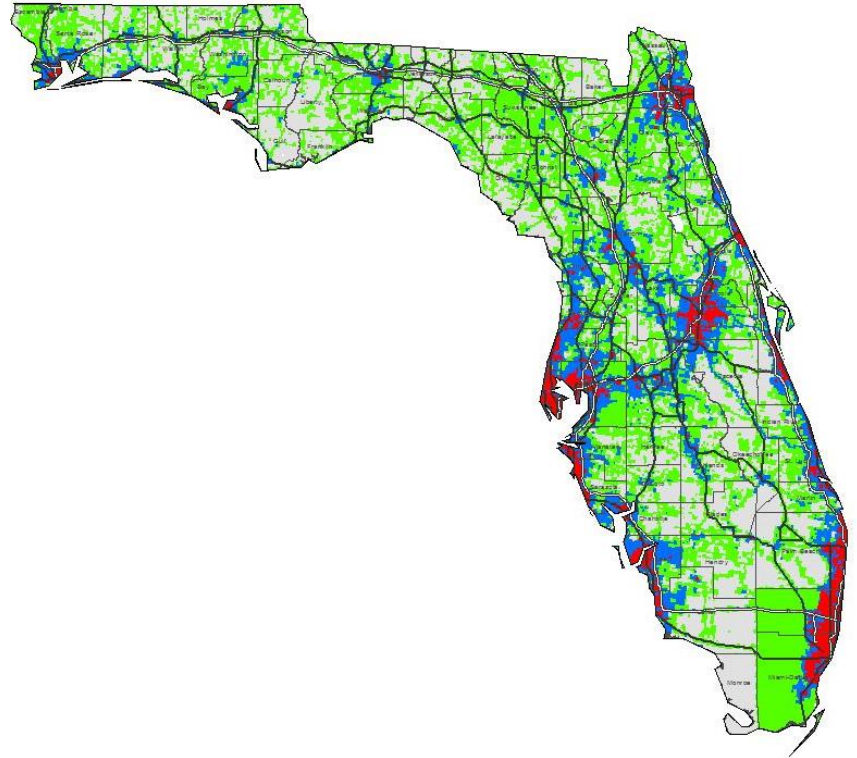
- Sensitive Information
 - Bidders' Library/Reading Room – States' data possibly available for others to view
- Coverage Objectives and Phasing
 - FL provided some of the most detailed response info
 - No phased deployment provided yet
- User Surveys
 - FL provided detailed survey data for about 400 agencies
 - Use of ranges in survey present challenges in aggregating data
 - Need assistance with user amounts and definition
- Total User Estimates
 - Not provided



FirstNet Maps

Original Baseline Coverage Objective Map

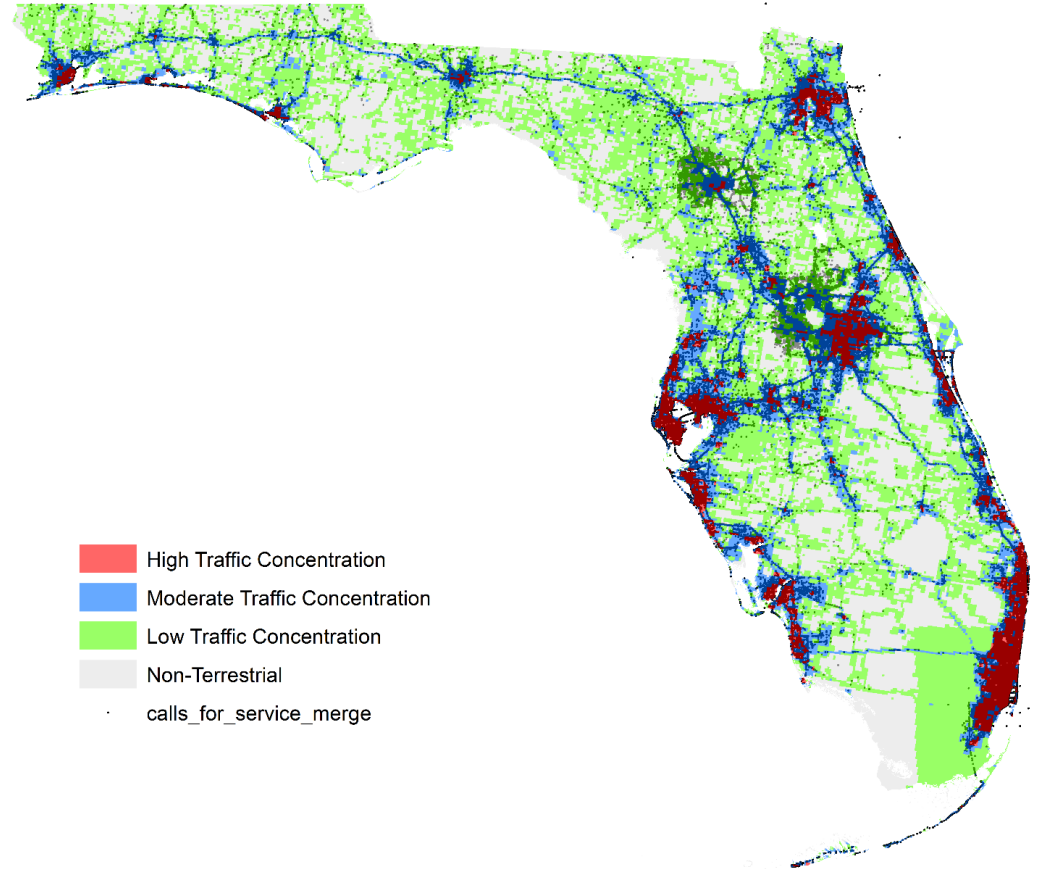
- Given to Florida in April
- Part of Draft RFP
- Indicated where FirstNet would base their final RFP if Florida did not give more data to FirstNet
- Concentrations
 - Red – High
 - Blue – Moderate
 - Green – Low



FirstNet Maps

Objectives on Top of Response Data

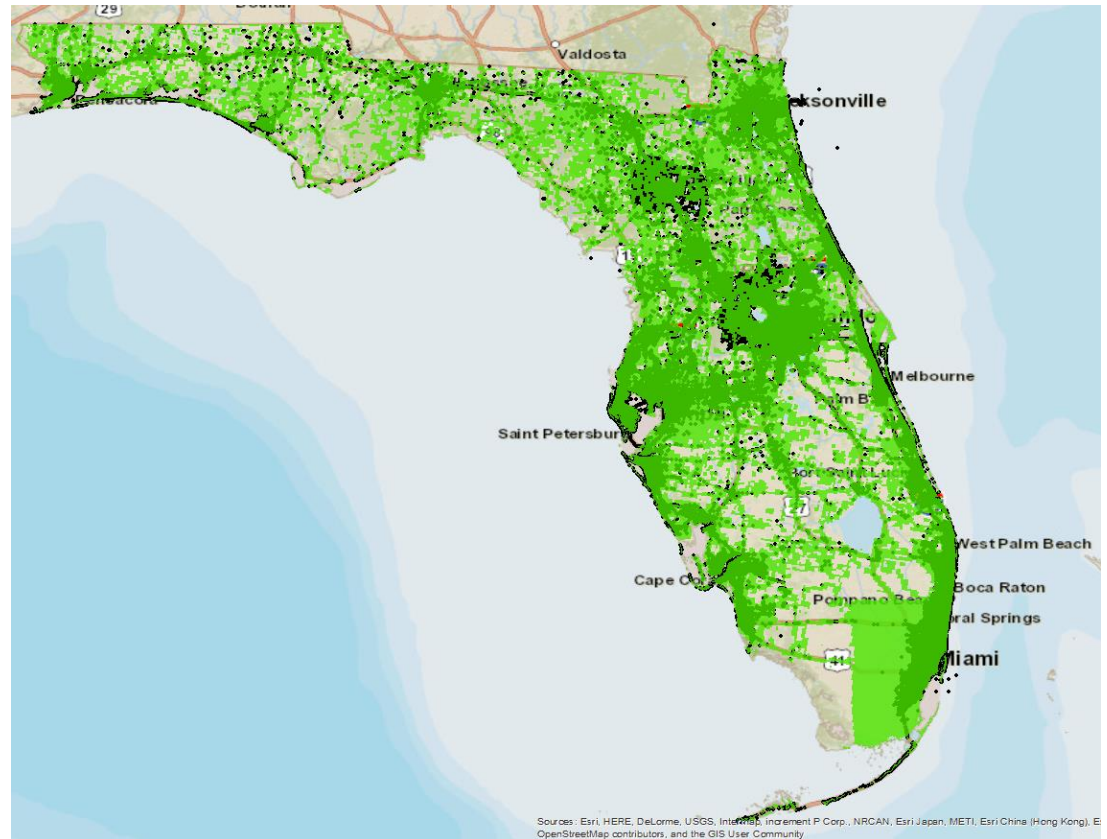
- Calls for service were merged onto original map
- Will be included in FirstNet's RFP



FirstNet Maps

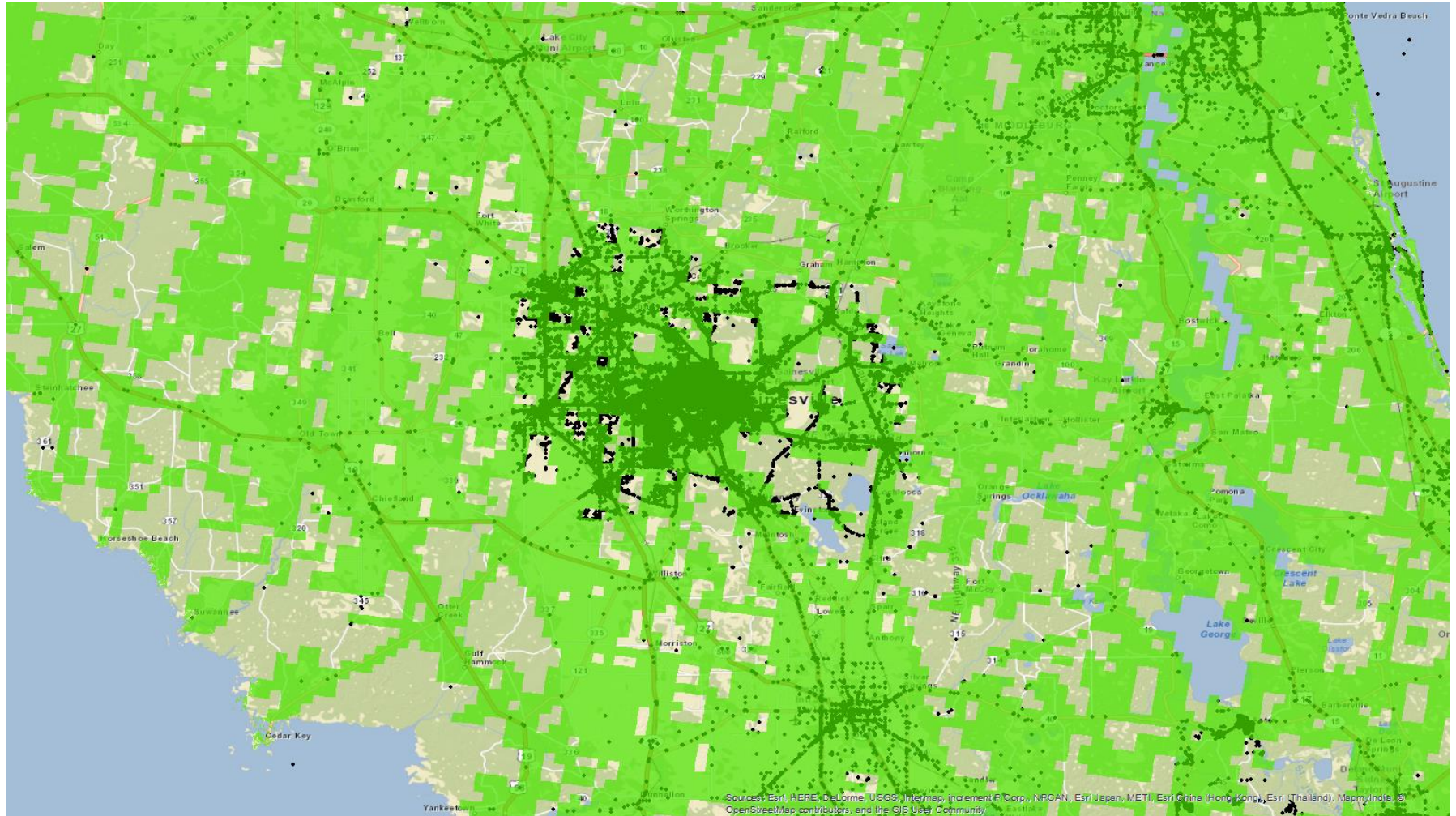
Statewide

- All data colored the same color and does not distinguish between the different concentrations



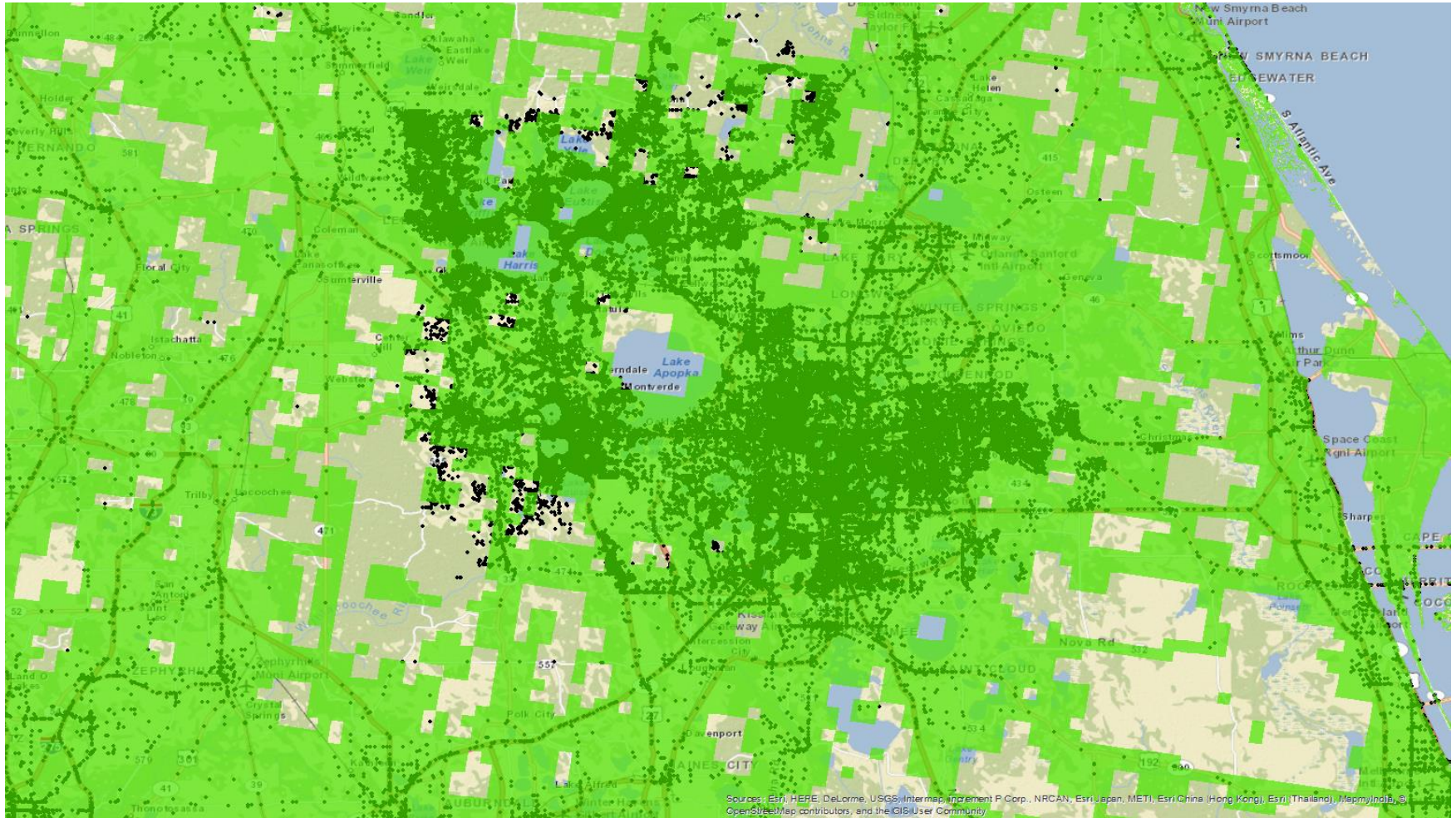
FirstNet Maps

Gainesville



FirstNet Maps

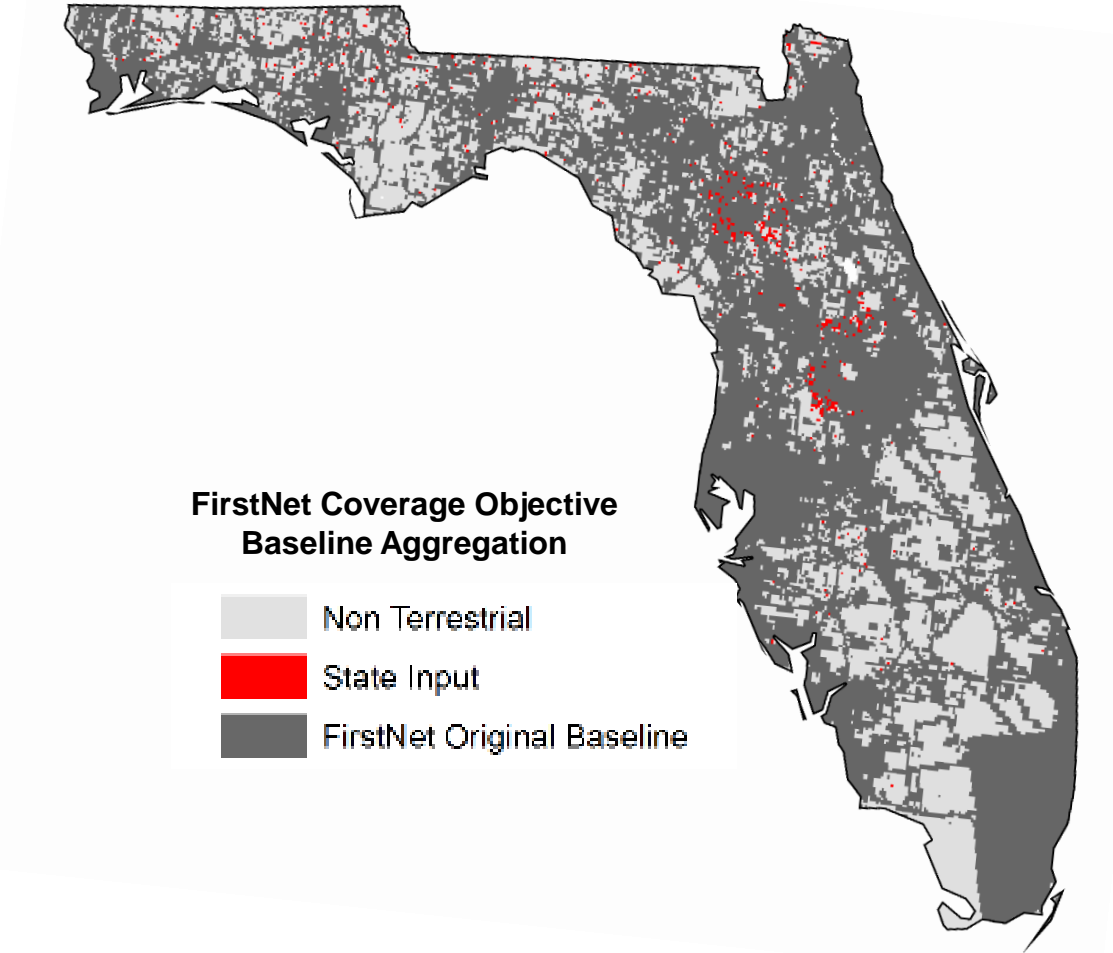
Orlando



FirstNet Maps

Updated Baseline Coverage Objective Map

- All data submitted to FirstNet was inserted into original baseline coverage objective map
- Red dots indicate input that FirstNet did not have



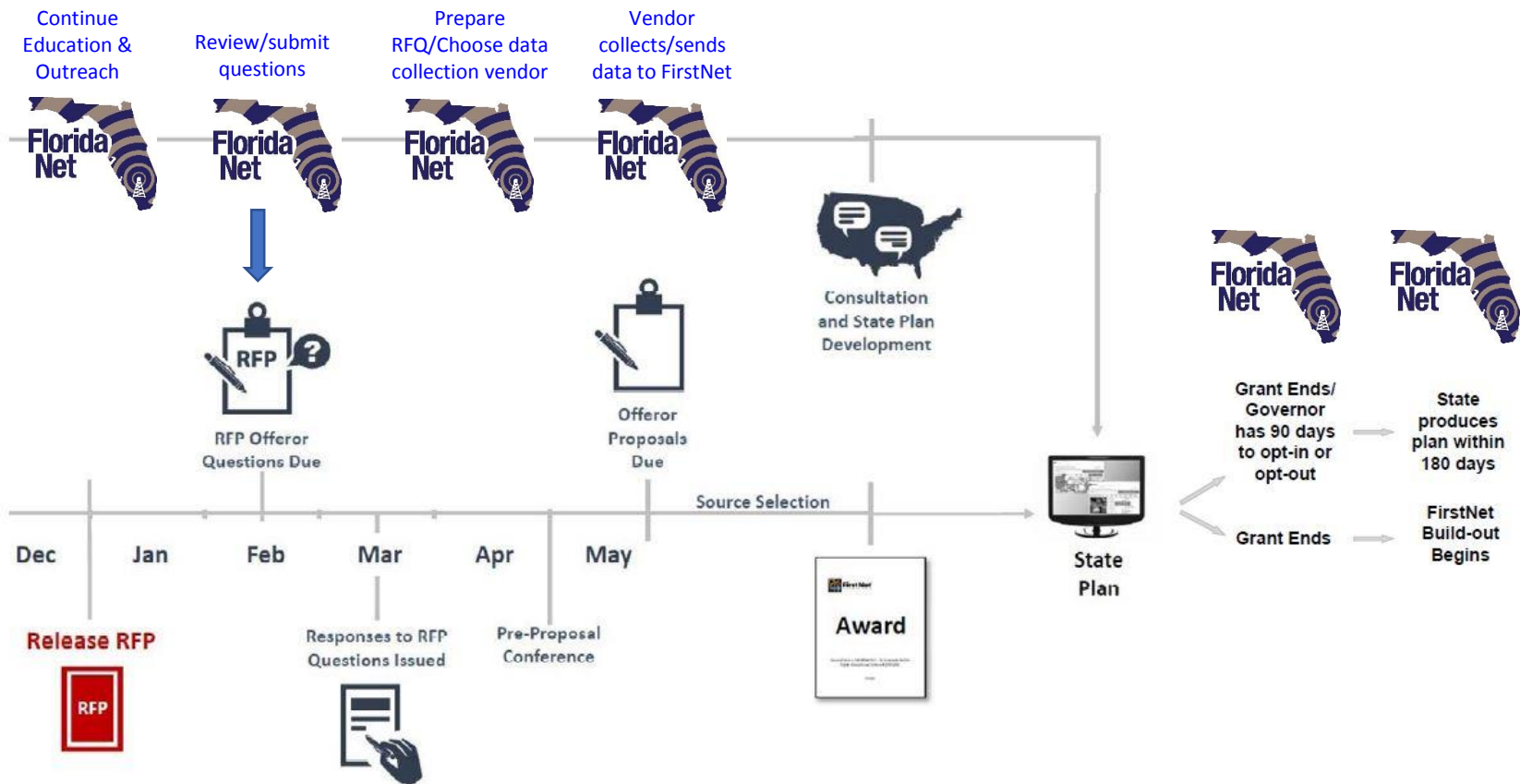


Looking Ahead



Project Plan

FirstNet and FloridaNet



Upcoming Events

January 2015	FirstNet RFP Released (tentative)
January 9-12, 2016	Florida Police Chiefs Association Conference (Ponte Vedra Beach, FL)
January 11-15, 2016	Southeast Public Safety Broadband Summit (Alabama)
March 21-25, 2016	International Wireless Communications Expo (Nevada)
April 8, 2016 <i>(tentative)</i>	Executive Committee Meeting (online)
April 8, 2016 <i>(tentative)</i>	Technical Committee Meeting (online)

If there are any events in your area that you would like us to attend or present, please let us know!

Next Steps

- Continue to collect data
- Prepare Data Collection RFQ
- Continue Education & Outreach
- Prepare for Consultation with FirstNet on State Plan



How You Can Help

- Visit FirstNet or FloridaNet website and learn more about the project
- Become a member of FloridaNet
- Take our Contract Vehicle Survey online
- Let us know if you have a data monitoring tool
- Provide collected data to ensure a better state plan
- Spread the word



Comments/Questions?



Please visit our website:

www.FloridaNet.gov

Or contact us at:

FloridaNet@flhsmv.gov



Thank You